



## *airCap HR*

**Thank you** for choosing airCap HR! The following information will help you get the most out of your purchase. We hope you have a great experience with airCap! If you ever have any questions or comments about the product, please reach out to us directly. We would love to hear from you!

## Warning!

The use of inflatable watercraft is inherently dangerous and should only be attempted by qualified individuals. It is your responsibility to ensure that your equipment is functioning properly. Only operate your watercraft when it is in good condition and properly inflated. Frequently check your watercraft's inflation pressure with a second calibrated pressure gauge to ensure airCap is functioning properly. Always wear a suitable personal flotation device when using your inflatable watercraft.

## How It Works

- airCap operates directly from light. To turn it on just place it in a well-lit environment (e.g. outdoors). It has no batteries, giving it a long life and eliminating the need for charging.
- airCap is designed to replace your watercraft's existing inflation valve cap. But it also works great as a conventional pressure gauge.

## Remove the Existing Cap and Tether

- Remove the existing valve cap. When the tether cord is exposed, untie it and remove it from the valve body.

## Attach the airCap HR Tether

- Thread the supplied tether cord on the airCap through one of the holes on the valve body.
- It may be necessary to loosen the valve and screw it out to thread the tether into the valve. This is done using a standard valve wrench.
- After cord is fed through valve body tie a knot close to the end.
- A double-overhand knot is preferred.
- Pull newly tied knot against valve body and retighten valve (if loose).

## Inflate Your Watercraft

- Inflate your boat or SUP to proper pressure as specified by the manufacturer.

## Insert the airCap HR

- Position the airCap with LCD facing away from the valve.
- Insert the attachment features into the valve body.
- Press firmly and rotate the airCap ¼ turn, securing it into the valve.
- The make-before-break seal is designed to prevent air from leaving your inflatable while the airCap is being inserted. Because of this, when inserting the cap, press the cap straight into the valve and turn.
- More force will be required than is needed for the original valve cap.

## Difficult to Install?

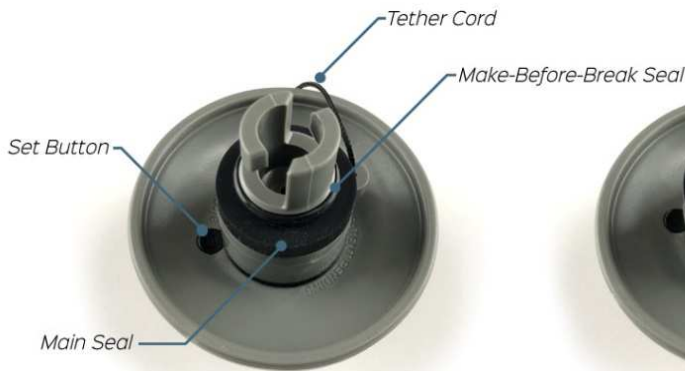
There are a wide variety of ¼- turn valves on the market; many with slightly different tolerances. To ensure that airCap HR seals well when installed, the main seal is tight on some valve versions. This can make it difficult in some instances to rotate airCap into the seated position. If you encounter this issue, don't worry there are several ways to solve it.

- 1) Remove the main seal, flip it over and reinstall it. There is a ring cutout on the bottom that will relieve the interface pressure. Make sure the make-before-break o-ring also gets reinstalled correctly. See Image 1.
- 2) Use the original seal that came with the valve. These seals are typically compatible. See Image 2 showing airCap HR with a Summit2 seal installed. Make sure the make-before-break o-ring also gets reinstalled correctly.

- 3) airCap HR will often become easier to turn into the seated position after a few turns back and forth. For tight valves the locking detents will wear a little and this will relieve some of the pressure.

*Points of Caution*

- It is important that airCap seals well against the valve body so that air doesn't slowly escape. If you change the seal or flip it over, test to make sure that there are no leaks.
- Make sure that the make-before-break o-ring gets reinstalled properly.



*Image 1. airCap HR Seal Normal*



*Image 2. airCap HR Seal Flipped*



*Image 3. Use of Valve Cap Seal*

## Operation

- airCap will display the inflation pressure whenever a suitable light source is present.
- See “Low Light Conditions” section for more information.

## Over Pressure Beeper

- The pressure inside an inflatable will increase with increases in temperature or elevation.
- airCap HR has a beeper which can alert the user when the watercraft pressure exceeds the beeper set point.
- The pressure set point is adjustable for each inflatable it is installed on.
- Bright conditions such as direct sunlight may be required for the beeper to sound.

## Setting the Over Pressure Beeper

- Make sure airCap is in full sunlight. If airCap displays ‘Sun’, there is insufficient light to change the beeper pressure setting.
- Enter the pressure setting mode by pressing the SET button on the rear of the airCap.
- The airCap display will flash repeatedly and display the current beeper pressure set point to indicate that it is in programming mode.
- Press the button within three seconds to change the beeper set point value. Repeat until the desired pressure set point is reached.
- Once at the desired setpoint, stop pressing the button and wait. After a moment, airCap HR will display “- - -”, indicating that the new setting has saved. airCap will then return to normal mode.
- Do not remove light source until the setting has saved, as indicated by three dashes on the LCD “- - -”.



Image 4. Save Screen (Dashes)

## Setting the Units Display

- Note: airCap ships pre-programmed with the most common units for your location. It is unlikely you will need to change the units unless desired.
- airCap can display in units of psi, bar, or kPa according to your preference.
- To enter pressure unit programming mode, completely cover the airCap display and solar panel for 10 seconds to ensure that it has been powered down.
- With the solar panel still covered, press and hold the programming button and turn the airCap on by exposing it to full sun.
- Make sure airCap is in full sunlight. If airCap displays 'Sun', there is insufficient light to change the units display setting.
- airCap will power on and enter unit programming mode. Click the button within 3 seconds to change the units.
- The current unit choice will flash on the display. Press the button again within 3 seconds to select the desired units.
- If the button is not pressed again, airCap will display "--", indicating that the new setting is being saved. airCap will then return to normal mode. Do not remove light source until the setting has saved, as indicated by three dashes on the LCD "---".

## Low Light Conditions

- airCap will operate in most light conditions, even when it is cloudy or overcast.
- If it is necessary to operate airCap after dark, a headlamp or flashlight will provide enough light to power your airCap.
- Make sure airCap is in full sunlight. If airCap displays 'Sun', there is insufficient light to change the beeper set point pressure or units display settings.

## Pressure Range

- airCap will read to pressures of 20 psi (138 kPa, 1.38 Bar).
- Above this pressure, airCap displays "OP" to alert the user that the watercraft is over pressure.
- Operation in over pressure condition is not recommended and could damage your airCap and watercraft.

## Cleaning and Maintenance

- airCap is built with rafting in mind, however it is a precision instrument and should be treated with care.
- Clean your airCap only with mild soap and water. Do not apply solvents to airCap.
- If watercraft repairs are to be made, it is best to remove airCap for storage in a safe location before the procedure.
- Avoid abrasive surfaces contacting your airCap, especially on the lens.
- airCap can be left attached to your watercraft or removed when the watercraft is in storage.

Note: This document subject to change without notice